

MODULAR CELL CULTURE BIOREACTOR AND ASSOCIATED METHODS

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Abstract Of The Disclosure

An apparatus and method for a modular cell culture bioreactor comprises a plurality of chambers for cell culture; at least one reservoir containing a cell support medium; a plurality of conduits fluidly connecting the at least one reservoir with the plurality of chambers; and at least one pump fluidly connected through the plurality of conduits with the at least one reservoir and with the plurality of chambers to pump cell support medium therethrough; wherein each individual chamber of the plurality of chambers includes at least one three-dimensional matrix comprising polyethylene terephthalate, a plurality of channels carrying the cell support medium and having the matrix positioned in fluid communication therebetween, and at least two openings into each the channel, wherein a first the opening is in fluid connection with the pump and a second the opening is in fluid connection with the reservoir.